

**IN THE CLAIMS:**

1. (original) A process for preparing catalyst systems of the Ziegler-Natta type, which comprises the following steps:
  - A) bringing an inorganic metal oxide into contact with a tetravalent titanium compound and
  - B) bringing the intermediate obtained from step A) into contact with a magnesium compound  $MgR^1_nX^{1-2-n}$ , where  $X^1$  are each, independently of one another, fluorine, chlorine, bromine, iodine, hydrogen,  $NR^X_2$ ,  $OR^X$ ,  $SR^X$ ,  $SO_3R^X$  or  $OC(O)R^X$ , and  $R^1$  and  $R^X$  are each, independently of one another, a linear, branched or cyclic  $C_{1-C_{20}}$ -alkyl, a  $C_2-C_{10}$ -alkenyl, an alkylaryl having 1-10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or a  $C_6-C_{18}$ -aryl and n is 1 or 2,
  - C) bringing the intermediate obtained from step B) into contact with a halogenating reagent of the formula  $R^Y_s-E-Y_{4-s}$  where  $R^Y$  are each, independently of one another, hydrogen, a linear, branched or cyclic  $C_{1-C_{20}}$ -alkyl, a  $C_2-C_{10}$ -alkenyl, an alkylaryl having 1-10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or a  $C_6-C_{18}$ -aryl, E is carbon or silicon, Y is fluorine, chlorine, bromine or iodine and s is 0, 1, 2 or 3 when E is carbon and s is 1, 2 or 3 when E is silicon.

2. (original) A process for preparing catalyst systems as claimed in claim 1, wherein a magnesium compound  $MgR^1_2$  is used in step B).
3. (currently amended) A process for preparing catalyst systems as claimed in claim 1 or 2, wherein the halogenating reagent used in step C) is chloroform.
4. (currently amended) A process for preparing catalyst systems as claimed in claim 1 any of claims 1 to 3, wherein the inorganic metal oxide used in step A) is a silica gel.
5. (currently amended) A process for preparing catalyst systems as claimed in claim 1 any of claims 1 to 4, wherein the tetravalent titanium compound used in step A) is titanium tetrachloride.
6. (currently amended) A process for preparing catalyst systems as claimed in claim 1 any of claims 1 to 5, which comprises the following steps:
  - A) bringing an inorganic metal oxide into contact with a tetravalent titanium compound
  - B) bringing the intermediate obtained from step A) into contact with a magnesium compound  $MgR^1_nX^1_{2-n}$ , where  $X^1$  are each, independently of one another, fluorine, chlorine, bromine, iodine, hydrogen,  $NR^X_2$ ,  $OR^X$ ,  $SR^X$ ,  $SO_3R^X$  or  $OC(O)R^X$ , and  $R^1$  and  $R^X$  are each, independently of one another, a linear, branched or cyclic

C<sub>1</sub>-C<sub>20</sub>-alkyl, a C<sub>2</sub>-C<sub>10</sub>-alkenyl, an alkylaryl having 1-10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or a C<sub>6</sub>-C<sub>18</sub>-aryl and n is 1 or 2.

- C) bringing the intermediate obtained from step B) into contact with a halogenating reagent of the formula R<sup>Y</sup><sub>s</sub>-E-Y<sub>4-s</sub>, where R<sup>Y</sup> are each, independently of one another, hydrogen, a linear, branched or cyclic C<sub>1</sub>-C<sub>20</sub>-alkyl, a C<sub>2</sub>-C<sub>10</sub>-alkenyl, an alkylaryl having 1-10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or a C<sub>6</sub>-C<sub>18</sub>-aryl, E is carbon or silicon, Y is fluorine, chlorine, bromine or iodine and s is 0, 1, 2 or 3 when E is carbon and s is 1, 2 or 3 when E is silicon, and
  - D) optionally bringing the intermediate obtained from step C) into contact with a donor compound.
7. (original) A process for preparing catalyst systems as claimed in claim 6, wherein the donor compound used in step D) contains at least one nitrogen atom.
8. (currently amended) A catalyst system of the Ziegler-Natta type which can be prepared by a process as claimed in claim 1 ~~any of claims 1 to 7~~.
9. (original) A prepolymerized catalyst system comprising a catalyst system as claimed in claim 7 and linear C<sub>2</sub>-C<sub>10</sub>-1-alkenes polymerized onto it in a mass ratio of from 1:0.1 to 1:200.

10. (currently amended) A process for the polymerization or copolymerization of olefins at from 20 to 150°C and pressures of from 1 to 100 bar in the presence of at least one catalyst system as claimed in claim 8 ~~or~~ 9 and, if appropriate, an aluminum compound as cocatalyst.
11. (original) A process for the polymerization or copolymerization of olefins as claimed in claim 10, wherein a trialkylaluminum compound whose alkyl groups each have from 1 to 15 carbon atoms is used as aluminum compound.
12. (currently amended) A process for the polymerization or copolymerization of olefins as claimed in claim 10 ~~or~~ 11, wherein ethylene or a mixture of ethylene and C<sub>3</sub>-C<sub>8</sub>- $\alpha$ -monoolefins is (co)polymerized.
13. (currently amended) The use of a catalyst system as claimed in claim 8 ~~or~~ 9 for the polymerization or copolymerization of olefins.